

**ABSTRACT**

A vapor trap for detecting VOCs includes a housing, having a first end portion, a second end portion and at least one opening for receiving gas vapor. The housing is at least partially buried in ground with a vapor containment mechanism detachably

5 connected to the first end portion of the housing. The vapor containment mechanism can be removed and replaced with a vapor sampling mechanism. An organic vapor analyzer can be connected in fluid relationship to the vapor sampling mechanism to measure VOCs. Optionally, a vacuum pump can be utilized to draw vapor into the vapor trap and then subsequently into the organic vapor analyzer. There can be a first selector valve  
10 located between the vapor sampling mechanism and the vacuum pump and a second selector valve located between the vapor sampling mechanism and the organic vapor analyzer. A preferred organic vapor analyzer is a photo-ionization detector.